

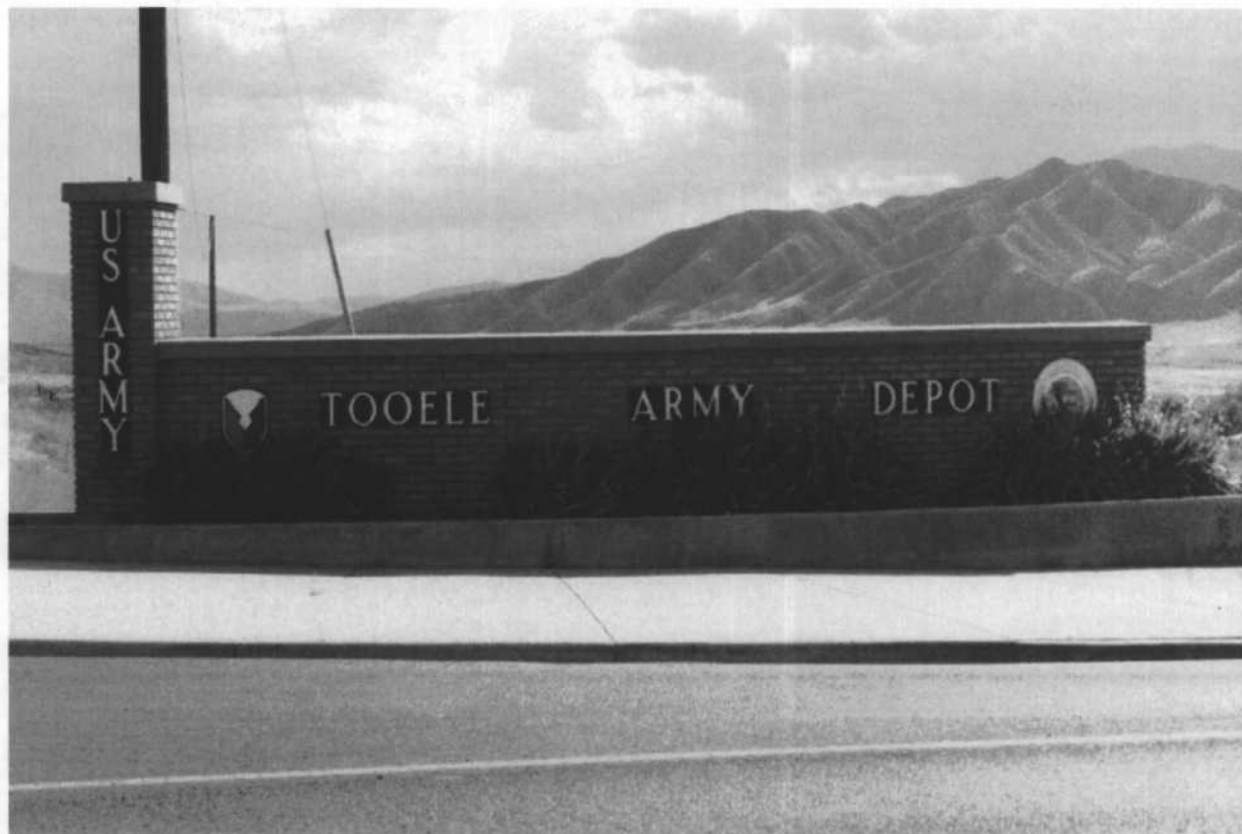
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# **SITE MANAGEMENT PLAN**

## **SWMU 37 – CONTAMINATED WASTE PROCESSING PLANT**

**Tooele Army Depot**  
Tooele, Utah

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**FINAL**

Prepared for:



Tooele Army Depot  
Environmental Office

Prepared by:



U.S. Army Corps of Engineers  
Sacramento District

March 2004

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## ACRONYMS AND ABBREVIATIONS

BGS	Below Ground Surface
BRAC	Base Realignment and Closure
CAO	Corrective Action Objective
CCR	Conditions, Covenants, and Restrictions
CMS	Corrective Measures Study
COC	Chemical of Concern
COPC	Chemical of Potential Concern
COPEC	Chemical of Potential Ecological Concern
CWPP	Contaminated Waste Processing Plant (SWMU 37)
DRMO	Defense Reutilization and Marketing Office
DSHW	Division of Solid and Hazardous Waste
EPC	Exposure Point Concentration
HHRA	Human Health Risk Assessment
HI	Hazard Index
PAH	Polynuclear Hydrocarbons
PCB	Polychlorinated Biphenyl
PCP	Pentachlorophenol
PPE	Personal Protective Equipment
RA	Risk Assessment
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RME	Reasonable Maximum Exposure
SVOC	Semi-Volatile Organic Compound
SWERA	Site-Wide Ecological Risk Assessment
SWMU	Solid Waste Management Unit
TEAD	Tooele Army Depot
TNT	Trinitrotoluene
UAC	Utah Administrative Code
UDEQ	Utah Department of Environmental Quality
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

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## SITE MANAGEMENT PLAN

### SWMU 37 – CONTAMINATED WASTE PROCESSING PLANT

### TOOELE ARMY DEPOT

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## 1.0 INTRODUCTION

### 1.1 Scope

This Site Management Plan describes the post-closure requirements for Solid Waste Management Unit (SWMU) 37, known as the Contaminated Waste Processing Plant (CWPP), at Tooele Army Depot (TEAD), in Tooele, Utah. The requirements presented herein are described in the Record of Decision (Dames & Moore, 2000). SWMU 37 consists of one large military building (Building 1325), a smaller storage building, and adjacent staging and storage areas. Analytical results from the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI)-Phase I and -Phase II sampling programs at SWMU 37 included elevated concentrations of four metals, several dioxin/furan compounds, semi-volatile organic compounds (SVOCs), 2,4,6-Trinitrotoluene (2,4,6-TNT), nitrate, and total phosphate. The final list of chemicals of concern (COCs) included benzo(a)anthracene, benzo(a)pyrene, and dioxins/furans. The Corrective Measures Study (CMS) Report recommended management measures at the site based on acceptable risks or hazards for human health and the environment for current and future military use scenarios.

The management measures recommended by the CMS Report consist of land use restrictions to prevent residential use of the site and provide for measures to protect human health and the environment should future land use change. The restrictions set forth in this Site Management Plan are to be incorporated into the TEAD Master Plan (Master Plan) by inclusion of this document in the Environmental Protection Component Plan and by inclusion of a reference to this document in the main section of the Master Plan. The United States Army Corps of Engineers (USACE) prepared the Site Management Plan for TEAD. In accordance with the Federal Facilities Agreement between the U.S. Army, the U.S. Environmental Protection Agency Region VIII, and the Utah Department of Environmental Quality, SWMU 37 is being managed under RCRA.

## **1.2 Site Background**

### **1.2.1 Site Location**

TEAD is located in Tooele Valley, Utah, approximately 35 miles southwest of Salt Lake City and directly west of the City of Tooele. The installation covers 23,610 acres. SWMU 37 is located in the southwest section of TEAD (Figure 1).

### **1.2.2 Survey and Legal Description**

Survey points defining the boundary of SWMU 37 were staked by a joint effort of TEAD personnel and personnel from the USACE, Sacramento District. This was followed by a property survey of the staked locations by USACE Sacramento District licensed land surveyors. The USACE surveyors developed parcel maps and a legal description, based on the boundary survey. The legal boundaries of the SWMU are presented in Figure 1.

Commencing at the Southwest corner of Section 5, Township 4 South, Range 5 West, Salt Lake Base and Meridian; which has Utah State Plane Coordinates of North 7349662.57 feet and East 1377948.37 feet. Thence North 03° 59' 37" East, a distance of 5057.90 feet to a set rebar and plastic cap stamped SWMU 37-1; said point also bears South 87° 18' 19" East, a distance of 5691.94 from the Southwest corner of Section 31, Township 3 South, Range 5 West, said point being the true point of beginning;

Thence North 33° 12' 25" East, a distance of 434.59 feet to a set rebar and plastic cap stamped SWMU 37-4; Thence South 55° 00' 29" East, a distance of 507.55 feet to a set rebar and plastic cap stamped SWMU 37-3; Thence South 36° 05' 10" West, a distance of 450.32 feet to a set rebar and plastic cap stamped SWMU 37-2; Thence North 53° 08' 11" West, a distance of 485.67 feet to a set rebar and plastic cap stamped SWMU 37-1; the true point of beginning;

### **1.2.3 Historical Use**

The CWPP consists of one large building (Building 1325), a smaller storage building, and adjacent staging and storage areas. The furnace, used to burn waste, is fired by diesel oil from an underground storage tank located south of the building. A propane tank is also present at SWMU 37. The facility itself, including the surrounding paved staging areas, is approximately 150 feet by 125 feet in size. A four-foot high barbed wire fence surrounds the facility. In 1990, an inspection performed by the Utah Department of Environmental Quality (UDEQ) revealed that the CWPP was being used to conduct test burns of materials containing

traces of hazardous wastes, a use for which it was not permitted. As a result of the inspection, the CWPP was ordered closed while the Army sought UDEQ approval to restart the operation.

Since its installation in approximately 1980 and until it was closed in 1990, the CWPP has been primarily used for flashing scrap metal and incinerating pentachlorophenol (PCP)-treated wooden crates, general packaging materials (dunnage), scrap resins, and fabric contaminated with explosives. This furnace is a batch-type basket furnace, rather than a rotary kiln type used elsewhere on TEAD. In addition, the CWPP is not used for deactivating munitions. Air pollution control equipment, installed during construction of the furnace, includes a cyclone, gas cooler, and baghouse.

When the CWPP was operating, all metal debris were certified as clean and sent to the Defense Reutilization and Marketing Office (DRMO) storage yard for salvage. Incinerator ash, cyclone dust, and baghouse dust were drummed as hazardous waste and sent to the 90-day Storage Yard pending analysis and disposal.

### **1.3 Site Environmental History**

#### **1.3.1 Past Investigations and Decision Documents**

##### **1.3.1.1 Phase I RCRA Facility Investigation (Montgomery Watson, 1993)**

Prior to the RFI-Phase I investigation, samples of cyclone/baghouse dust and/or incinerator ash were collected for waste characterization purposes. Laboratory analytical results indicated that concentrations of lead and cadmium exceeded the threshold for characterizing a waste as hazardous based on toxicity. In addition to the metals, dioxins and furans were found in ash and dust in the air pollution control system after burning PCP-treated wood. PCP was detected in all samples of baghouse dust, but not in the furnace ash.

During Phase I sampling in July 1992, 12 surface soil samples were collected from locations around the perimeter of the facility from areas with exposed soil immediately adjacent to the building and paved areas. Sample locations were selected to provide general coverage around the perimeter of Building 1325 and associated paved areas, with the objective of establishing the presence or absence of contamination at SWMU 37. The majority of these surface soil samples were located along the edges of the asphalt in areas that would receive

stormwater runoff. All samples were analyzed for metals, VOCs, SVOCs, dioxins/furans, and explosives.

Laboratory analytical results of the samples collected during the RFI-Phase I investigation indicated that concentrations of metals (cadmium, selenium, and zinc), dioxins/furans, SVOCs, one volatile organic compound (VOC) (xylene), 2,3,6-Trinitrotoluene (TNT), nitrate, and total phosphate exist in the soil at SWMU 37 above background concentrations.

#### **1.3.1.2 Phase II RCRA Facility Investigation (Montgomery Watson, 1997)**

Phase II sampling activities were conducted to define the degree to which contaminants detected by the Phase I sampling had migrated horizontally and vertically. This included migration via surface and air pathways (lateral extent) and infiltration to depth by contaminants (vertical extent). The following sampling activities were conducted:

- Seven shallow boreholes were hand augered at locations where elevated metals, SVOCs, and/or dioxins/furans were previously detected to provide information on the vertical infiltration of contaminants. Three samples were collected from each hand-augered boring (21 samples total) and submitted for analysis of SVOCs and dioxins/furans. One of these borings was located adjacent to an oil/water separator to investigate the possibility of contamination due to spills or overflows. Another boring was completed next to a sanitary sewer system holding tank northeast of Building 1325.
- Eight surface soil samples were collected 500 feet from the facility in the north, northeast, east, southeast, south, southwest, west, and northwest directions. These samples were collected to define the areal extent of contamination originating from SWMU 37, and were analyzed for SVOCs and dioxins/furans.
- Two 3-foot deep borings were hand augered at locations over 1,000 feet from the SWMU 37 facility, and two samples were submitted from each boring for total metals analysis. These samples were collected to further characterize background concentrations at the site.

The results of the RFI sampling programs at SWMU 37 indicated that several types of contaminants have been released to the surrounding surface and shallow subsurface soils. The

metals, explosives, and VOC (xylene) detected during Phase I sampling did not exhibit either the concentrations or extent to warrant further Phase II sampling. However, dioxin/furan compounds and SVOCs were detected consistently during the Phase II investigation in the surface soils immediately surrounding Building 1325, and two dioxin compounds exist at low levels extending at least 500 feet from the facility. The most probable transport mechanism for these compounds is deposition from incinerator stack emissions.

Some migration of dioxins/furans to the subsurface has occurred, mainly in areas where stormwater runoff collects from surrounding paved or concrete pad surfaces. The depth to which these contaminants have migrated has not been completely defined since detections persisted to total depth in three of the auger holes. The sandy, permeable soils at SWMU 37 tend to allow subsurface migration of contaminants, especially where stormwater collects and infiltrates.

The distribution of the SVOCs detected at SWMU 37 follows that of the dioxins/furans. The surface soils in the immediate vicinity of Building 1325 show numerous detections of SVOCs, mainly polyanuclear hydrocarbons (PAHs). One phthalate compound was detected in 50 percent of the surface soil samples at a distance of 500 feet from the facility. Subsurface detections of SVOCs existed in the same areas where dioxins/furans were encountered at depth.

Additionally, during Phase II activities, a final list of chemicals of potential concern (COPCs) was established. All of the chemicals that were detected during Phase I and Phase II soil sampling activities were evaluated for the frequency of detections and compared to background concentrations. Many of the chemicals were eliminated from the COPC list due to the results of the background comparison. Several other chemicals were eliminated from the COPC list, as their frequency of detection was less than 5%. The final list of COPCs included 14 chemicals (cadmium, selenium, 2,4,6-TNT, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, indeno(1,2,3-c,d)pyrene, benzo[g,h,j]perylene, dioxins/furans, fluoranthene, phenanthrene, and pyrene).

### **1.3.1.3 Corrective Measures Study Report (Dames & Moore, 2000)**

In order to establish a final list of chemicals of concern (COCs), the maximum concentrations of each COPC was compared to the industrial (the anticipated future use of the area) corrective action objective (CAO). COPCs whose maximum concentration was less than their respective industrial corrective action objectives (CAOs) were eliminated, leaving



benzo(a)anthracene, benzo(a)pyrene, and dioxins/furans as the final surface soil COCs. No subsurface soil COCs were established for SWMU 37.

To determine if the COCs warranted corrective action, the exposure point concentrations (EPCs) were compared to the CAOs for each COC. The EPCs were developed during the RFI process and represent COC- and site-specific concentrations likely to be encountered at the site. The EPCs for dioxins/furans and benzo(a)pyrene are higher than their corresponding CAOs, while the EPC for benzo(a)anthracene is lower than its corresponding CAO. Because the CAO concentrations correspond to a cancer risk of  $1 \times 10^{-6}$ , the EPC concentrations for dioxins/furans, benzo(a)anthracene, and benzo(a)pyrene do not result in an unacceptable human health risk for SWMU 37 for industrial use. The calculated cancer risk for current and reasonably anticipated future land use scenario (industrial) is  $1 \times 10^{-5}$ . Provided the site remains industrial in use, human health risks will remain within acceptable levels and ecological risks will remain low. Accordingly, the CMS Work Plan recommended only management measures for SWMU 37. Deed restrictions were the only corrective measure proposed in the CMS Work Plan.

### **1.3.2 Interim Actions**

Because no unacceptable risks or hazards from the assumed future military land use are identified for SWMU 37, no interim corrective actions were performed.

### **1.3.3 Final Remedial Action**

Although COCs exist at SWMU 37, due to future land use and with land use restrictions in place, no active remedial actions are required. The recommended alternative for SWMU 37 is land use restrictions to prevent residential development.

## **2.0 SITE RISK**

Rust Environment and Infrastructure (Rust E&I) performed the Site-Wide Ecological Risk Assessment for SWMU 37 (Rust E&I, 1997). Montgomery Watson performed the Human Health Risk Assessment (HHRA) (Montgomery Watson, 1997) for SWMU 37 in conjunction with the RFI-Phase II investigation. The following sections summarize the findings.

## **2.1 Contaminants of Concern**

The maximum concentration of each COPC was evaluated against the corresponding CAO for surface and subsurface soil. Because the reasonably anticipated future land use is military, deport worker CAOs (industrial) were used for surface soil evaluation. Construction worker CAOs were used for subsurface soil evaluation. Based on this evaluation, the COCs for surface soil at SWMU 37 are benzo(a)anthracene, benzo(a)pyrene, and dioxins/furans. There are no COCs for subsurface soil. Dioxins/furans were present at concentrations above their CAOs at three locations; benzo(a)anthracene was detected in one sample at a concentration slightly exceeding its CAO; and benzo(a)pyrene was detected in only two of 27 samples and exceeded its CAO in both locations.

## **2.2 Human Health**

### **2.2.1 Exposure Pathways**

Results of the HHRA (Montgomery Watson, 1997) indicate that, under the future residential land use scenario (required for evaluation per UAC R315-101-5.2(b)(1)), the cancer risks at SWMU 37 exceed the target of  $1 \times 10^{-6}$  for both adult and child receptors. Because the risk and HI are greater than State of Utah goals, the CMS includes SWMU 37 per the requirements of UAC-R315-101-1(b)(4).

Under the future construction worker land use scenario, the RME cancer risk is  $6 \times 10^{-7}$ , and the non-cancer HI is 0.006. Both levels are less than State of Utah and EPA targets of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$  and 1.0, respectively. Under the current military land use scenario (reasonably anticipated future land use), the RME cancer risk calculated in the human health RA is  $1 \times 10^{-5}$ , and the non-cancer risk is 0.002. The risk level is within the State of Utah and EPA target range of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$ , and the HI is below the goal of 1.0. The lead model was not used for SWMU 37, as lead was not detected in soil at concentrations above the 400 mg/kg screening threshold.

#### **2.2.1.1 Current Land Use**

The current land use at SWMU 37 is military.

### **2.2.1.2 Future Land Use**

There is no planned change in land use for SWMU 37. The reasonably anticipated future land use for SWMU 37 is military.

### **2.2.2 Known or Potential Risk to Identified Receptors**

Since the risk assessment determined that the cancer risks for the current and planned future military use are below the maximum of  $10^{-4}$  specified in the State of Utah Risk Rule, active remediation efforts are not required and only management measures were evaluated for the site.

## **2.3 Ecological Risk**

Rust E&I (1997) performed a SWERA for TEAD. During the Tier 1 ecological assessment, it was determined that the vegetation at SWMU 37 has been impacted to a greater degree by the physical activities at the site rather than by the chemicals that may have been released. The ecological assessment, therefore, addressed the potential adverse impact to the wildlife receptors and it was not considered necessary to address the ecological effects on the vegetation. The results of the Tier I assessment indicated that the detected concentrations of several chemicals at SWMU 37 warranted a Tier 2 evaluation.

The objective of the Tier 2 assessment was to further evaluate the Tier 1 chemicals of potential ecological concern (COPECs) by comparing the receptor's chemical exposure dose to a biological endpoint. Direct exposure occurs when a receptor comes into direct contact with a chemical (such as a mouse burrowing in contaminated soil) and indirect exposure occurs via the food web (such as when a raptor consumes the mouse). SWMU 37 has no surface water, thus, the surface water exposure water exposure pathway was excluded from the ecological assessment. The results of the

Tier 2 assessment concluded that there was no potential adverse impact to ecological receptors at this site, and was recommended that SWMU 37 be proposed for no further investigation.

## **3.0 NATURE AND EXTENT OF REMAINING CONTAMINANTS**

Elevated concentrations of four metals were detected in five of 12 surface soil samples collected during the RFI-Phase I. Although metals were not detected in the RFI-Phase II

investigation, the RFI-Phase II retained both cadmium and selenium as COPCs in surface soil for evaluation in the CMS Work Plan. Neither metal evaluated in the CMS Work Plan became a COC for SWMU 37.

Dioxins/furans were consistently detected in surface soil samples collected next to Building 1325A. They were detected in 12 of the 20 surface soil samples, and in six of the seven samples collected from the surface soil zone of borings installed at the site. The RFI-Phase II retained dioxins/furans as a COPC in surface and subsurface soil. Concentrations of dioxins/furans were evaluated in the CMS Work Plan and became COCs in surface soil only.

Ten SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene) were detected in one or more samples at SWMU 37. These SVOCs are classified as PAHs, commonly found in incinerator ash. Their distribution was generally similar to that observed at the site for dioxins/furans. The RFI-Phase II retained the 10 SVOCs as COPCs in surface soil. One explosive compound (2,4,6,-TNT) was also detected in one surface soil sample and was retained as a surface soil COPC. The final list of COCs included two SVOCs; benzo(a)anthracene and benzo(a)pyrene.

The Phase II RFI Report concluded that past activities at SWMU 37 account for the contaminants detected in surface and shallow subsurface soil. Furthermore, the sources of the previously discussed COPCs at SWMU 37 include the deposition of stack emissions from incineration and spills of incinerator residues.

No groundwater monitoring has been performed at SWMU 37. Depth to groundwater in the vicinity of the site is estimated 450 feet bgs. Based on groundwater depth, the low concentrations of contaminants detected in soil, the tendency of COCs at the site to adsorb strongly to soil, low precipitation rates, and high evaporation rates, the contaminants detected at SWMU 37 are not expected to affect groundwater (Montgomery Watson, 1997).

#### **4.0 INSTITUTIONAL CONTROLS OR RESTRICTIONS**

Institutional controls in the form of land use restrictions for military property was the only corrective measure alternative considered for SWMU 37. These controls are to ensure that the land is not used for residential purposes in the future. These restrictions are to be incorporated into the Master Plan by inclusion of this document in the Environmental Protection

Component Plan and by inclusion of a reference to this document in the main section of the Master Plan. Additionally, if ownership of the property should be transferred in the future, deed restrictions shall be incorporated in the Real Estate Deed and associated Covenants, Conditions and Restrictions (CCRs) for Economic Development Conveyance for Tooele Army Depot and recorded in the Tooele County Recorder's Office. The restrictions will be legally binding and shall run with the land in perpetuity.

#### **4.1 Commercial/Industrial Use**

In accordance with the CMS, SWMU 37 shall be used solely for military and not for residential and/or commercial/industrial purposes. Residential uses include, but are not limited to, housing, day-care facilities, and schools. Commercial and industrial uses include, but are not limited to, military, administrative/office space, manufacturing, and warehousing.

#### **4.2 Soil Excavation**

The Army shall not conduct or permit others to conduct any excavation, digging, or disturbing of the soils at SWMU 37 without prior written approval of the TEAD EO. In granting excavation approval, the EO may impose reasonable terms and conditions that are deemed necessary to ensure compliance with appropriate sampling protocols, health and safety plans, and other reasonable requirements to protect human health and the environment, and to ensure proper disposal of site soils.

#### **4.3 Enforcement**

The above sections set forth protective provisions, subject to which the Property and every portion thereof shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. These restrictions are intended to run with the land in perpetuity. These restrictions shall apply to and bind all subsequent owners and occupants of the property.

### **5.0 MONITORING REQUIREMENTS**

### **5.1 Requirements**

The results of RFI-Phase I and -Phase II investigations, and subsequent SWERA and HHRA, identified three COCs at SWMU 37. The cancer risks and non-cancer hazard levels calculated for the COCs for the current and anticipated future land use scenarios are below the EPA and State of Utah requirements for evaluating a remedial action (UAC R315-101-6(e)). However, the risk assessment for hypothetical adult and child residents indicate the site may pose a risk, therefore, management measures are considered for SWMU 37 to meet the requirements of UAC R315-101-6. According to the CMS, the following corrective measures alternative for SWMU 37 was recommended:

- Land Use Restrictions to Prevent Residential Use

### **5.2 Responsible Party**

The Army is responsible for implementing the CMS by inserting land use restrictions for SWMU 37 in the TEAD Master Plan, performing semi-annual inspections of the site, and submitting the monitoring report described in Section 5.5 to the recipients listed in Section 5.7.

Tooele Army Depot shall designate personnel as the inspection team. The team shall consist of two members, of which at least one must be from the Depot's EO. The team shall be responsible for performing a site inspection and preparation and distribution of the monitoring report.

### **5.3 Monitoring Activities**

- Verification of Land Use Restrictions – The inspection team shall ensure land use restrictions preventing any residential building construction have been placed in the TEAD Installation Master Plan. Any differences between the land use restrictions stated in the Master Plan to those required by the CMS Report will be addressed in the monitoring report.
- Site Visit and Visual Inspection – The inspection team will walk around the interior perimeter of SWMU 37, observing and noting any changes and abnormalities including soil erosion, soil color, repairs at the pit, habitat, vegetation, building construction, and digging. Any findings shall be recorded in the monitoring report.
- Photographic Record: Photographs will be taken facing north, east, south and west. Each picture shall have a label with the names of the inspection team members, location of

the photographer, direction facing, date photograph taken, and a description of any relevant features in the photograph.

#### **5.4 Health and Safety for Site Visitors and Inspectors**

There are no contamination hazards for occasional site visitors and inspectors at SWMU 37. No personal protective equipment (PPE) above Level D is required during site visits. Biological hazards (snakes, spiders) and physical hazards (berm, seasonal pond, etc) may exist at SWMU 37.

#### **5.5 Monitoring Report Format**

The Monitoring Report shall include the following at a minimum:

- Brief Summary
- Verification of Land use Restrictions in the TEAD Installation Master Plan
- Site Inspection Report
- Recommendations
- Photographs

The report is expected to be a very brief memo consisting of 1-2 pages plus photographs. The reports shall be kept in the Administrative Record in accordance with UAC R315-8-2.6(4)(d), until site close-out.

#### **5.6 Frequency and Schedule of Monitoring Report**

The Monitoring Reports are due semi-annually on April 15 and October 15.

#### **5.7 Monitoring Report Submittal**

The Monitoring Report with a cover letter shall be submitted to the following

- TEAD: Environmental Coordinator
- USACE, Sacramento District: Project Manager
- Information Repository

## **5.8 Five Year Review**

The five-year-review for SWMU 37 shall be performed in accordance with the EPA five-year-review guidance. The monitoring reports will be used for the five-year-review. The purpose of the five-year-review is to reevaluate the site to determine any changes in site conditions and recommend continuation of monitoring, close out, or remediation of the site. The first five-year review for TEAD was conducted in 2000. The results of the five-year-review shall be sent to the recipients listed in Section 5.7, the USEPA, and UDEQ.

## **6.0 SITE ACCESS**

Vehicular access to the site is currently unrestricted for military personnel. A four-foot high barbed-wire fence currently surrounds the site.

## **7.0 PROCEDURES IF INSTITUTIONAL CONTROLS BREACHED**

The land use restrictions for SWMU 37 will be protective of human health and the environment based on the current mission at TEAD. A future change in the use at this site will require a reevaluation of the ability of the institutional controls to maintain the current level of protection. U.S. Army Regulations require that the plan be examined with regards to the impacts on human health and the environment if the use at the site changes. These changes could take the form of unauthorized residential use or transfer of the property under BRAC.



## 8.0 REFERENCES

1. Dames & Moore, 2000, Corrective Measures Study Work Plan, Group A Suspected Releases SWMUs, Tooele Army Depot, Tooele, Utah, June 2000.
2. Dames & Moore, 2000, Corrective Measures Study Report, Group A Suspected Releases SWMUs, Tooele Army Depot, Tooele, Utah, April 2001.
3. Montgomery Watson, 1993, Phase I RCRA Facility Investigation Report, Tooele Army Depot – North Area Suspected Releases SWMUs, Tooele, Utah, December 1993.
4. Montgomery Watson, 1997, Phase II RCRA Facility Investigation Report, Tooele Army Depot – North Area, Group A Suspected Releases SWMUs, Tooele, Utah, August 1997.
5. Rust E&I, 1997, Tooele Army Depot – Final Site-Wide Ecological Risk Assessment, October 1997.

## 9.0 FIGURES

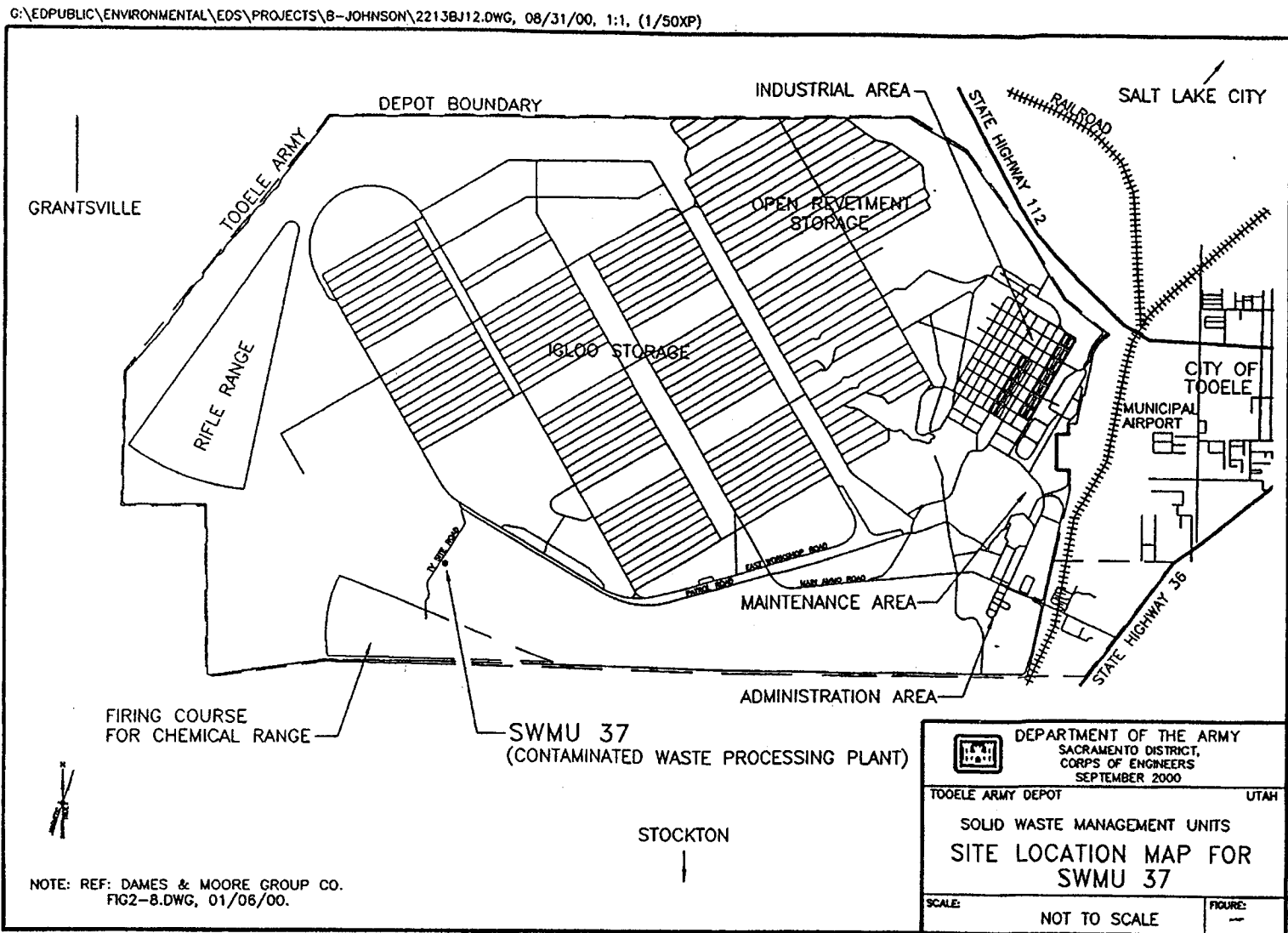
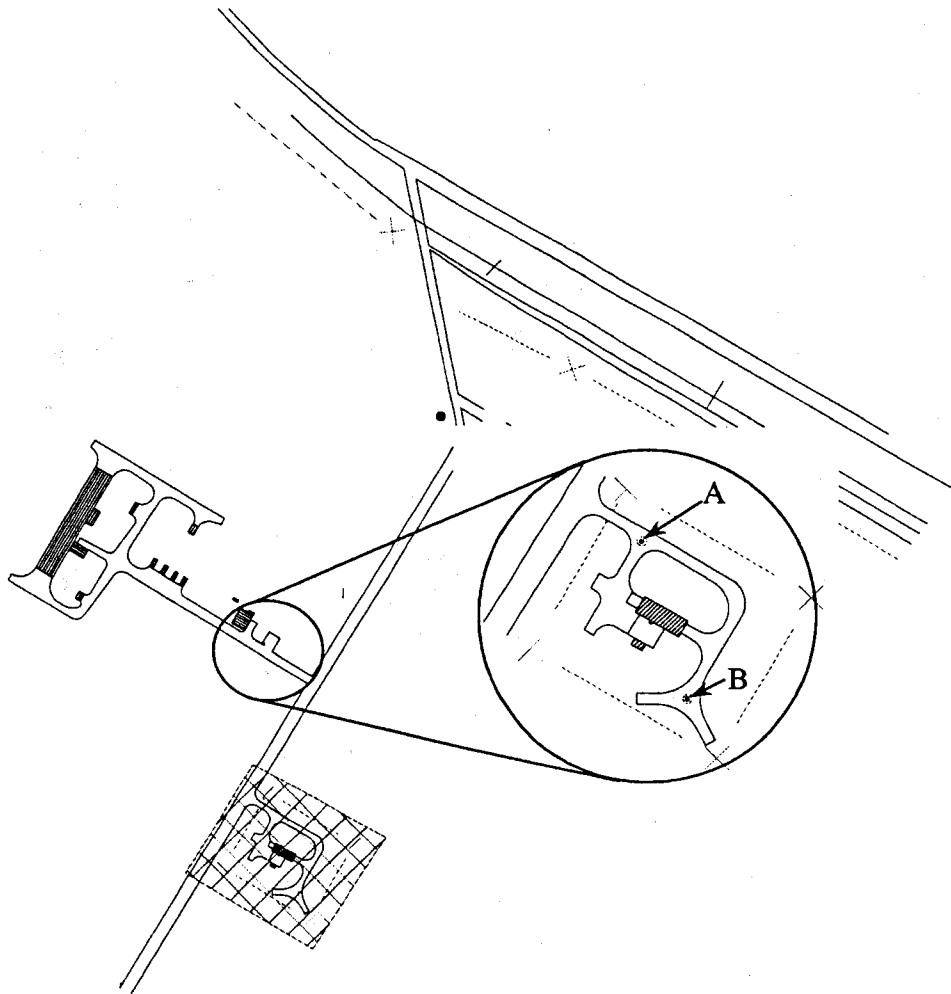


Figure 1: General location of SWMU 37



**Figure 2: General vicinity map of SWMU 37.**

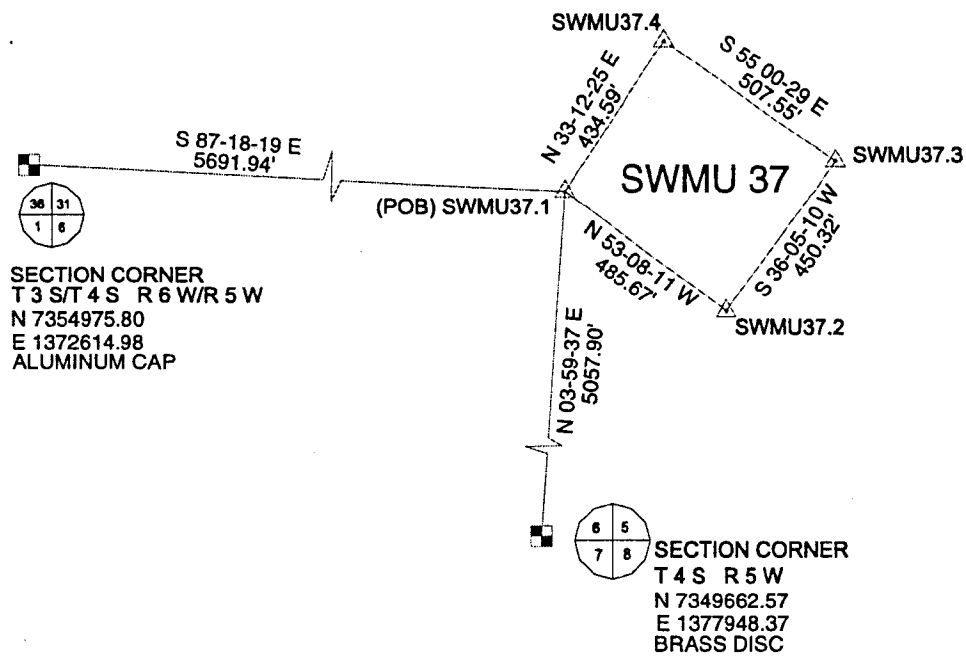


Figure 3: Plat map for SWMU 37.